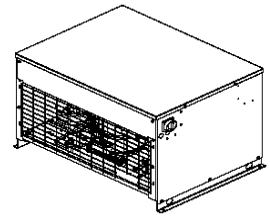
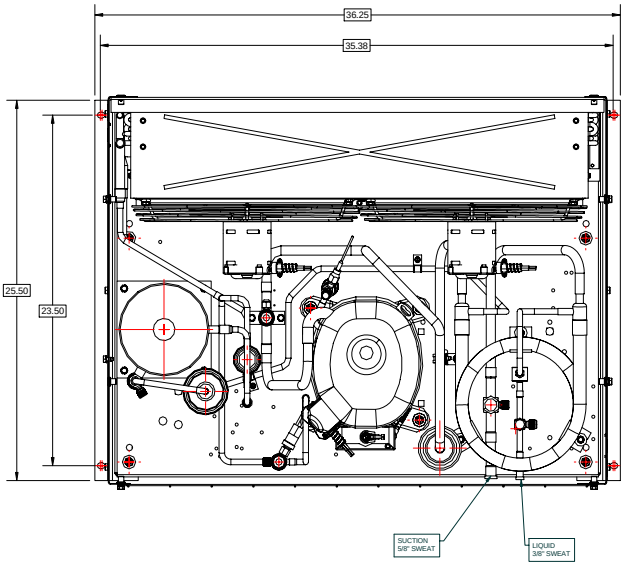
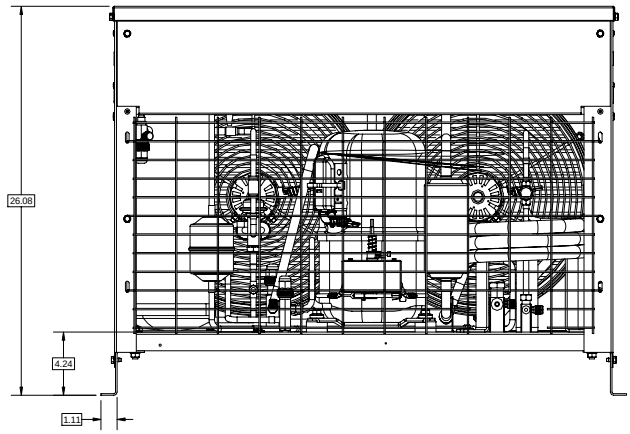
TECUMSEH HERMETIC CONDENSING UNIT

Model	**AWA9517ZXTHN**
BOM	**32L2142-2E**
Air Cooled	**2 HP**
Application	**Commercial Temp**
Refrigerant	**R404A**







Model	Dim. Enclosure(inch)*			Line connections		Pumpdown	Air flow	Oil Ch.	Gross weight
	L	W	H	Suction	Liquid	90% @ 90°F	SCFM	Oz.	Lbs.
AWA9517ZXTHN	31.50	40.50	26.75	5/8	3/8	20.45	1800	38.6	320

*) Enclosure Mounting Holes, 38.5 x 25.5

Factory charge 20 psig dry air, **MUST BE EVACUATED**

Evaporator		Ambient Temeratures															
		80°F				95°F				100°F				110°F			
°F	Psig	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T
-10	23.2	8300	1900	198	86	6900	1930	244	101	6400	1930	260	106	5400	1930	297	115
-5	27.5	9600	2010	201	87	8000	2050	247	102	7400	2060	263	106	6200	2070	300	116
0	32.1	11000	2120	204	88	9100	2180	250	102	8500	2190	267	107	7100	2220	303	117
5	37.0	12600	2230	209	89	10400	2310	254	103	9700	2330	271	108	8200	2370	307	118
10	42.4	14200	2350	213	90	11900	2440	259	104	11100	2470	276	109	9400	2520	312	119
15	48.2	16000	2470	218	91	13400	2580	264	106	12500	2610	281	110	10700	2680	318	120
20	54.5	17900	2590	224	93	15100	2720	270	107	14100	2760	287	111	12200	2840	324	121
25	61.2	19900	2720	231	94	16900	2860	277	108	15800	2910	294	113	13700	3000	330	122
30	68.4	22000	2860	238	96	18800	3010	284	110	17700	3060	301	114	15400	3170	337	123
35	76.1	24300	2990	246	98	20800	3160	292	111	19600	3220	309	116	17200	3340	345	125
40	84.4	26700	3130	255	100	23000	3320	301	113	21700	3380	317	117	19200	3510	354	126
45	93.2	29200	3280	264	102	25300	3480	310	115	23900	3540	327	119	21200	3690	363	128
50	103.0	31800	3430	274	104	27700	3640	320	116	26300	3710	336	121	23400	3870	372	129
55	113.0	34500	3580	284	106	30200	3810	330	118	28700	3880	347	122	25700	4050	382	131

Performance @ 60 Hz ; Return Gas Temperature 20°F max superheat above 20°F evap, 40°F max below 20°F evap ; --- SubCooling 5°F

PRELIMINARY PERFORMANCE DATA

Parts/Specifications

STANDARD

Unit BOM	**32L2142-2E**
Unit MODEL	**AWA9517ZXTHN**
Refrigeration RANGE	-10°F to 45°F
Design Pressure Low	181
Design Pressure High	450
Volts - HZ - Ph	200-230V 3~ 60HZ
Voltage Range	180 - 254
Min. Circuit Ampacity	14.03
Max. Fuse Size	25
Compressor MODEL	AW617RT-120-A2
Compressor BOM	AWA9514ZXT
Compressor LRA	63.4
Compressor RLA	7.30
OverLoad	
Relay	
Run Capacitor	
Run Capacitor Rating	
Start Capacitor	
Start Capacitor Rating	
Contactor	91014B
Unit Drawing	DGU1918-L104
Wiring Diagram	WD23-2FM

Fan Motor	810F050C20
Fan Motor Qty	2
Fan Motor RLA	0.7
Fan Blade	51568
Fan Guard	70831
Shroud	70648-2
High Pressure switch	84095-2L
Low Pressure Control	84026-2
Dual Pressure Conrol	
Condenser	50858-1
Head Master Valve	70083-1
Check Valve	56626
Process Valve	31583-1
Liquid Valve	56500-K06
Suction Valve	56500-K10
Receiver	51099-2L
Receiver Qty	1
Accumulator	
Liquid Filter	70081-3
Sight Glass	70084
Suction Filter	70822-6S
CrankCase Heater	91022-1

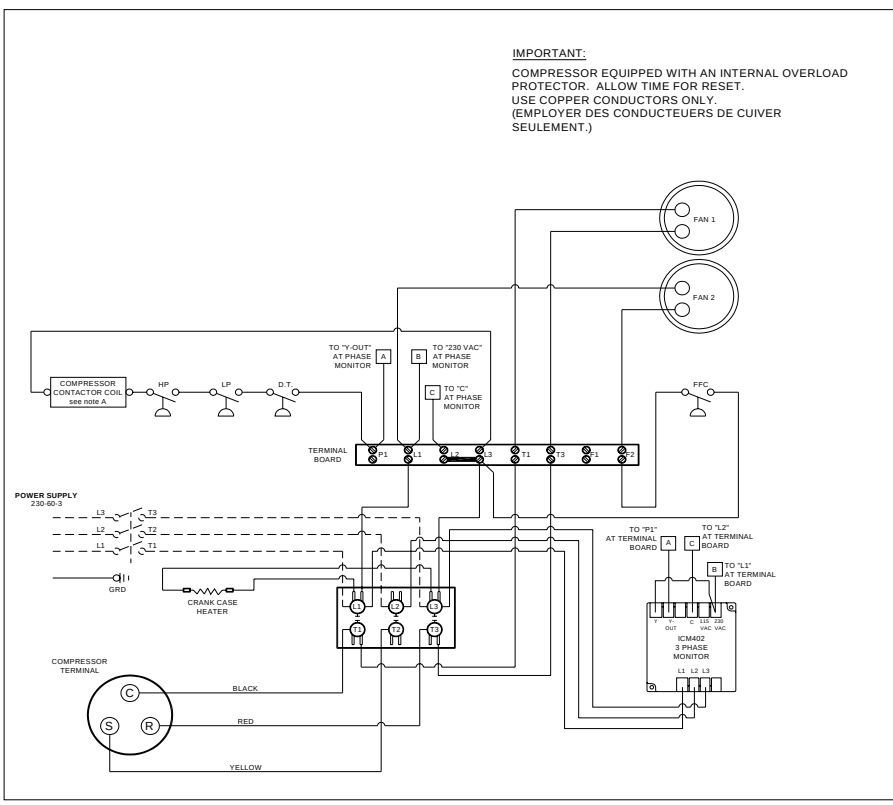
OPTIONAL

Fix.Fan Switch #1 (F opt.)	84132-01
Fix.Fan Switch #2 (F opt.)	
Adjus. Fan Ctrl. (A opt.)	
Defrost Clock (Tn option)	
Defrost Heaters Contactor	
Rec. Heater (R option)	
Solenoid Valve (loose)	
Disconnect (D option)	
Wiring with F option	WD23-2AT2
Wiring with A option	
Phase monitor, ICM402	900-10026

BOM INDEX DESCRIPTION

32xYYYY- 2ERA(F)TnDS

E Enclosure
R Receiver Heater
A Adjustable fan control
F Fixed fan Control
T1 Defrost timer option
T2 Defrost timer & Defrost Heaters Contactor
D Disconnect
S Solenoid liquid Valve (supplied loose)



NOTES

FIELD WIRING NOTES

1. ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
2. CONNECT INCOMING POWER LEADS FROM POWER SUPPLY TO L1, L2, AND L3 IN COMPRESSOR CONTACTOR OR TO L1, L2 AND L3 IN DISCONNECT SWITCH (IF PROVIDED). USE COOPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT.) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING

GENERAL NOTES:

A. CONTACTOR COIL CIRCUIT IS FACTORY CONNECTED TO 230 V SOURCE IN PANEL AS SHOWN
B. COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.

AFC ADJUSTABLE FAN CONTROL
LP LOW PRESSURE CONTROL
HP HIGH PRESSURE SWITCH
D.T. DISCHARGE THERMOSTAT
FACTORY COMPONENTS
OPTIONAL FACTORY COMPONENTS

CONDENSING UNIT WIRING, 230V 60Hz 3 Ph, fixed fan control,
PHASE MONITOR OPTION

REVISION -
AUG. 18, 2009
WD23-2FM